

**ARULMIGU PALANLANDAVAR ARTS
COLLEGE FOR WOMEN , PALANI.**

PG DEPARTMENT OF CHEMISTRY

LEARNING RESOURCES

CHEMISTRY FOR COMPETITIVE EXAMINATIONS



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CHEMISTRY FOR COMPETITIVE EXAMINATIONS

Q.1 The non-metal which has a shining appearance is

(a) sulphur (b) phosphorus (c) iodine (d) bromine

Ans: (c)

Q.3 Which is the 'odd man' in the following?

(a) brass (b) common salt (c) cane sugar (d) water

Ans: (a)

Q.4 Which of the following is called 'the King of Chemicals'?

(a) Nitric acid (b) Hydrochloric acid (c) Silver nitrate (d) Sulphuric acid

Ans: (d)

Q.5 The modern system of symbols was evolved by

(a) Dalton (b) Cavendish (c) Avogadro (d) Berzelius

Ans: (d)

Q.6 The neutron was discovered by

(a) Chadwick (b) Madam Curie (c) Becquerel (d) Aston

Ans: (a)

Q.7 A mixture of ethyl alcohol and water can be separated by

(a) evaporation (b) sublimation (c) using a separating funnel (d) fractional distillation

Ans: (d)

Q.8 The Long Form of the Periodic Table is based on

(a) atomic number (b) valency (c) atomic mass (d) atomic radius

Ans: (a)

Q.9 The term 'nucleons' applies to

(a) neutrons (b) protons (c) protons and neutrons (d) protons and electrons

Ans: (c)

Q. 10 Isotopes differ in the number of

a) Protons b) Neutrons c) Electrons d) Protons and electrons

Ans: (b)

Q.11 Radium was isolated from

(a) galena (b) dolomite (c) sylvine (d) pitchblende

Ans: (d)

Q.12 Real gases tend to become ideal Under

(a) low pressure and high temperature (b) low pressure and low temperature (c) high pressure and low temperature (d) high pressure and high temperature

Ans: (a)

Q.13 The Combined Gas Law equation is

(a) $P_1V_1T_1 = P_2 V_2 T_2$ (b) $P_1V_1T_2 = P_2V_2T_1$ (c) $P = P_1 + P_2 + P_3$ (d) $C =$

Ans: (b)

Q.14 The value of Avogadro Number is

(a) 6.023×10^{22} (b) 1×10^{-14} (c) 6.056×10^{-6} (d) 6.023×10^{23}

Ans: (d)

Q.15 The addition of a neutron to the nucleus of an atom

(a) increases the atomic mass of the atom

(b) decreases the atomic mass of the atom

(c) increases the charge on the nucleus

(d) decreases the charge on the nucleus

Ans: (a)

Q.16 Which of the following is a halogen?

(a) Radon (b) Astatine (c) Cesium (d) Ruthenium

Ans: (b)

Q.17 Which among the following is a metalloid?

(a) Tin (b) Silver (c) Iodine (d) Arsenic

Ans: (d)

Q.18 A non-metal which is a good conductor of electricity is

(a) graphite (b) phosphorus (c) sulphur (d) iodine

Ans: (a)

Q.19 An element which is preserved under water is

(a) Sodium (b) red phosphorus (c) white phosphorus (d) sulphur

Ans: (c)

Q.20 Quick lime has the formula

a) CaO b) Ca(OH)₂ c) NaOH d) Na₂CO₃

Ans: (a)

Q.21 'Hypo' is

(a) sodium nitrate (b) Potassium nitrate (c) sodium thiosulphate (d) ammonium chloride

Ans: (c)

Q.22 The compound used in photography is

(a) ammonium dichromate (b) copper Sulphate (c) magnesium Sulphate (d) sodium thiosulphate

Ans: (d)

Q.23 Brine is a solution of

(a) sodium chloride in water (b) iodine in alcohol (c) sulphur in carbon disulphide (d) Potassium iodide in water

Ans: (a)

Q.24 Which of the following is a Bleaching agent?

(a) Potassium chlorate (b) Hydrogen peroxide (c) Copper sulphate (d) Silver Nitrate

Ans: (b)

Q.25 Alum is used

(a) as an analgesic (b) in the purification of water (c) as a fertilizer (d) as a disinfectant

Ans: (b)

Q.26 Lunar caustic is

(a) calcium sulphate (b) ammonium chloride (c) caustic soda (d) silver nitrate

Ans: (d)

Q.27 The formula for cane sugar is

(a) C₆H₁₂O₆ (b) C₂H₅OH (c) C₁₂H₂₂O₁₁ (d) C₇H₈O

Ans: (c)

Q.28 Which of the following is not a chemical change?

(a) Burning of magnesium ribbon in air (b) Distillation of water (c) Heating of cane sugar (d) Setting of cement

Ans: (b)

Q.29 The process that takes place in the atom bomb is

(a) nuclear fusion (b) radioactive disintegration (c) nuclear fission (d) chemical decomposition

Ans: (c)

Q.30 Which of the following is not a metal?

(a) Lithium (b) Helium (c) Sodium (d) Cobalt

Ans: (b)

Q.31 Solid carbon dioxide is used

(a) as a drying agent (b) as a refrigerant (c) as an antiseptic (d) as a bleaching agent

Ans: (b)

Q.32 A burning substance which continues to burn in a jar of carbon dioxide is

(a) zinc (b) red phosphorus (c) magnesium (d) sulphur

Ans: (c)

Q.33 The first organic compound prepared in the laboratory was

(a) acetic acid (b) chloroform (c) urea (d) methane

Ans: (c)

Q.34 Marble is (a) calcium carbonate

(b) sodium carbonate (c) magnesium sulphate (d) ferric chloride

Ans: (a)

Q.35 Compounds containing only carbon and hydrogen are called

(a) carbohydrates (b) carbides (c) hydrocarbons (d) carbonyls

Ans: (c)

Q.36 The form of carbon used in the decolourising sugar solution is

(a) wood charcoal (b) animal charcoal (c) coconut charcoal (d) lamp black

Ans: (b)

Q.37 Artificial diamonds were produced by

(a) Moissan (b) Davy (c) Faraday (d) Marie Curie

Ans: (a)

Q.38 Marsh gas is

(a) ethane (b) ethylene (c) acetylene (d) methane

Ans: (d)

Q.39 The oldest known organic compound is

(a) urea (b) methane (c) acetic acid (d) benzene

Ans: (c)

Q.40 Vinegar is the trade name for

(a) chloroform (b) acetic acid (c) phenol (d) carbon tetrachloride

Ans: (b)

Q.41 The scientist who synthesised the first organic compound (urea) in the laboratory was

(a) Wohler (b) Dalton (c) Lavoisier (d) Fischer

Ans: (a)

Q.42 Methylated spirit is a mixture of

(a) methyl alcohol and acetic acid (b) methyl alcohol and ethyl alcohol (c) ethyl alcohol and pyridine (d) methyl alcohol and pyridine

Ans: (b)

Q.43 Which of the following is used as a food preservative?

(a) phenol (b) washing soda (c) absolute alcohol (d) vinegar

Ans: (d)

Q.44 Which of the following is baking soda?

(a) $\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}$ (b) NaHCO_3 (c) $\text{Na}_2\text{CO}_3 \cdot \text{H}_2\text{O}$ (d) NH_4Cl

Ans: (b)

Q.45 The carbon cycle ensures that

(a) the percentage of carbon dioxide in the air is kept almost constant

(b) air always contains a constant proportion of oxygen

(c) sufficient amounts of carbohydrates are produced

(d) the process of photosynthesis proceeds smoothly

Ans: (a)

Q.46 The simplest hydrocarbon is

(a) benzene (b) methane (c) ethane (d) butane

Ans: (b)

Q.47 During fermentation, the by-product is

(a) ethyl alcohol (b) methyl alcohol (c) carbon monoxide (d) carbon dioxide

Ans: (d)

Q.48 If people sleep in closed rooms where the charcoal fire is burning, they die due to

(a) carbon monoxide (b) carbon dioxide (c) methane (d) phosgene

Ans: (a)

Q.49 Carbogen is used in

(a) CO_2 poisoning (b) CO poisoning (c) phosgene poisoning (d) anaesthesia

Ans: (b)

Q.50 Soda-water contains

(a) sodium bicarbonate (b) sodium carbonate (c) carbonic acid (d) sodium hydroxide

Ans: (c)

51. The Alkali metals are called good reducing agents. This implies that __:

- [A] They easily capture electrons
[B] They are not stable at room temperature
[C] They easily lose electrons
[D] They don't act with dilute acids

Hide Answer

Correct Answer: C [They easily lose electrons]

52. Which of the following is not a non-metallic mineral?

- [A] Mica
[B] Bauxite
[C] Granite
[D] Silica

Hide Answer

Correct Answer: B [Bauxite]

53. White Phosphorous is represented by which among the following symbols?

- [A] P1
[B] P2
[C] P3
[D] P4

Hide Answer

Correct Answer: D [P4]

54. "Atoms can neither be created nor destroyed." This principle was given by __?

- [A] Avogadro
[B] Dalton
[C] Rutherford
[D] Niels Bohr

Hide Answer

Correct Answer: B [Dalton]

55. Which among the following is known as Quick Lime?

- [A] CaO
[B] CaCO₂
[C] Ca(OH)₂
[D] CaCl₂

Hide Answer

Correct Answer: A [CaO]

56. Potassium permanganate is used to purify water. Which among the following properties of Potassium permanganate helps in this work?

- [A] sterilizing
- [B] oxidizing
- [C] reducing
- [D] leaching

Hide Answer

Correct Answer: B [oxidizing]

57. Which among the following is a common salt in Detergents?

- [A] Sulphate
- [B] Nitrate
- [C] Sulphonate
- [D] Carbonate

Hide Answer

Correct Answer: A [Sulphate]

58. Why most of the aromatic hydrocarbons burn with a sooty flame?

- [A] Because the carbon-hydrogen ratio in aromatic compounds is high
- [B] Because of the presence of the strong carbon-carbon bonds
- [C] Because, hydrocarbons are unsaturated
- [D] Because the carbon-hydrogen ratio in aromatic compounds is low

Hide Answer

Correct Answer: A [Because the carbon-hydrogen ratio in aromatic compounds is high]

59. Which among the following impurity in drinking water causes the “Bamboo Spine” disorder?

- [A] Nitrate
- [B] Fluorides
- [C] Arsenic
- [D] Sulphides

Hide Answer

Correct Answer: B [Fluorides]

60. With reference to the nuclear fuels, how the Fissile material is different from the Fertile material?

1. While Fissile material undergoes nuclear fission, Fertile material undergoes nuclear fusion

2. While Fissile material can be directly used, Fertile material can not be used directly in nuclear reactors

Choose the correct option from the codes given below:

- [A] Only 1 is correct
- [B] Only 2 is correct
- [C] Both 1 & 2 are correct
- [D] Neither 1 nor 2 is correct

Hide Answer

Correct Answer: B [Only 2 is correct]

Question: 1

61. Which one of the following is not a constituent in automobile emission?

- (A) Benzene
- (B) Nitrogen oxide
- (C) Carbon monoxide
- (D) Hydrogen peroxide

[View Answer](#)

Ans: D

Hydrogen peroxide

Question: 2

62.The most abundant metal in the earth's crust is

- (A) Aluminium
- (B) Zinc
- (C) Copper
- (D) Iron

[View Answer](#)

Ans: A

Aluminium

63.Question: 3

63.Which among the following is used as a catalyst in the production of high octane fuels?

- (A) HCL
- (B) HF
- (C) HNO₃
- (D) H₂SO₄

[View Answer](#)

Ans: D

H_2SO_4

64.Question: 4

64.The metal used in storage batteries is

- (A) Lead**
- (B) Tin**
- (C) Copper**
- (D) Iron**

[View Answer](#)

Ans: A

Lead

65.Minerals are deposited and accumulated in

- (A) Igneous rocks**
- (B) Metamorphic rocks**
- (C) Sedimentary rocks**
- (D) None of the above**

[View Answer](#)

Ans: C

Sedimentary rock